

Eurasian Watermilfoil in Maple Lake

(WBIC# 86-0134)

Wright County, MN

Late-Spring Delineation Survey – June 16, 2016



Survey, Analysis, and Reporting by:

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Certified Lake Manager
www.NALMS.org

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Survey & Analysis Methods

Late-Spring EWM Delineation Survey

Freshwater Scientific Services, LLC completed delineation survey for Eurasian watermilfoil (EWM) in Maple Lake (#86-0134) on June 16, 2016. During this survey, we navigated a meandering transect over portions of the lake that had supported EWM in the past (areas supplied by PLM Lake & Land Management). While navigating this transect, we used a combination of surface observations (using polarized sunglasses), rake tosses, and sonar readings to locate and delineate areas of EWM growth. Sonar and visual assessments were conducted continuously, with subsequent rake tosses to assess EWM abundance at ~300 locations. At each of these rake locations, we dragged a sampling rake over approximately 10 square feet of lake bottom and recorded the EWM density based upon the number of milfoil plants (stem count) retrieved on the rake. We used a hand-held Garmin GPS unit (GPS-MAP78) to record each of the sampled locations, and documented water depth, EWM plant height, and EWM abundance (1 to 3 scale as described below).

Score	Visual	Rake
1	Light EWM / Solitary EWM plants	1-2 stems
2	Moderate EWM / Dense patches	3 to 9 stems
3	Dense EWM / Uniform matted EWM	10+ stems

We entered the recorded locations, water depths, EWM plant heights, and rake densities into desktop GIS software and projected results over aerial imagery of the lake. We then delineated beds of EWM growth in the surveyed areas, and calculated the area, and mean EWM density within each of the delineated beds (using point data).

Maple Lake (#86-0134)

Late-Spring Delineation of Eurasian Watermilfoil: June 16, 2016



Surveyed: June 16, 2016

Surveyor: JA Johnson

Affiliation: Freshwater Scientific Services

Methods: Visual, Rake, Sonar



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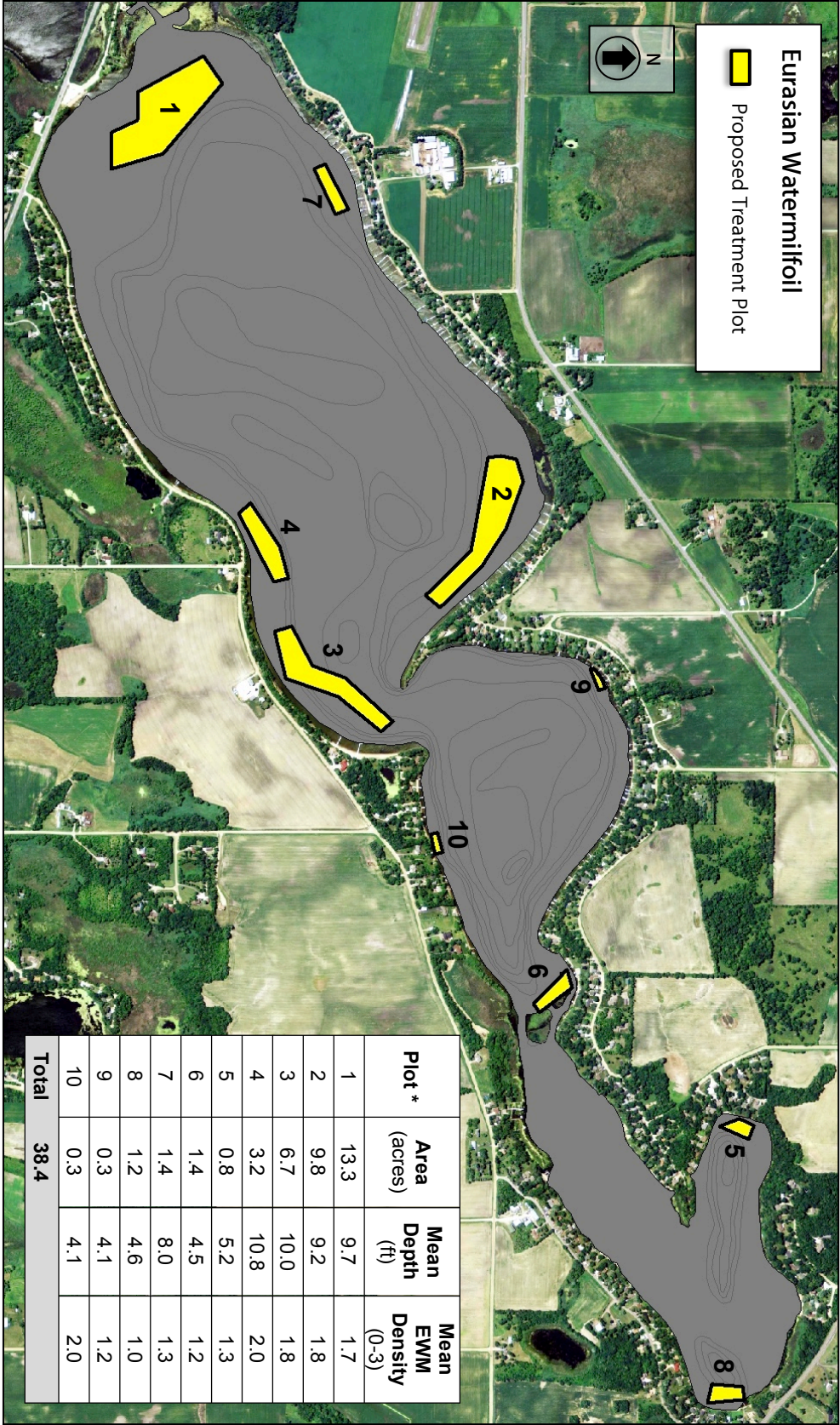
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Map produced for PLM Lake & Land Mgmt by:

Maple Lake (#86-0134)
Late-Spring Delineation of Eurasian Watermilfoil: June 16, 2016



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* Plots are numbered in the recommended order of priority for treatment (1=highest priority).